

Prioritize factors affecting consumer buying behavior in online social media marketing

Reyhaneh Toudeh Bahambari/ Hossein Hakimpour*/ Mahdi Mahmoodzadeh Vashan/ Hamid Rezaeifar

Abstract

The study of the factors affecting consumer buying behavior in online environments is taking on a more detailed form every day. For this purpose, the present study was conducted with the aim of prioritizing the factors affecting consumer buying behavior in online social media marketing. The analysis and validation of indicators were done using the combined method of structural equation modeling and partial least squares. In addition, in order to determine the importance and type of performance of each factor, the IPMA matrix was used. The research data was influenced by consumer information, which mostly included women with a master's degree and in the age range of 36 to 50 years, using the available non-probability sampling method that is common for online surveys, and using Cohen's effect size formula, 466 people were examined. The findings of the research showed that the factor of consumer engagement has the highest degree of importance and ease of use has the highest level of performance in the general model of social media. In addition, the factor of consumer engagement has the highest degree of importance, and electronic word-of-mouth (EWOM) has the highest level of performance in Instagram, and vice versa, EWOM is the most important, and consumer engagement has the highest degree of performance in Telegram. These results can be used by marketers to influence consumer buying behavior and in online marketing plans in their desired direction.

Key words: social media marketing, consumer buying behavior, consumer engagement, EWOM, IPMA matrix.

Introduction

Nowadays, there is a growing interest in studying consumer behavior in the field of marketing. In the current era where the business environment is changing and since consumer behavior and its extensive study is the backbone of any company's marketing strategy, a detailed and comprehensive study of all its aspects seems necessary for an organization to be successful (Auf et al., 2018; Kumar Sharma, 2014). In addition, the global outbreak of Covid-19 has affected different parts of human societies and the economy in different ways around the world. This unprecedented situation has had numerous consequences in consumers' daily lives and has dramatically changed consumer behavior and how businesses operate (Eger et al., 2021; Hassan et al., 2021). The increased use of online social media is one of the results of the recent pandemic. Many businesses have had to quickly adapt the way they communicate with customers and create new tools to engage their consumers through digital communication and social media marketing (Grimmer, 2022); because such developments in the forms and dimensions of new technologies, along with continuous innovations in the features and functionality of smartphones, have facilitated online shopping behavior of consumers (Aw et al., 2021; Canio & Fuentes-blasco, 2021).

From the customer's perspective, social media is a vital tool for researching companies and making buying decisions (Murtaza, 2021). Such media are changing the way organizations function and evolve in many fields, including changes in their relationships with society, understanding of consumer behavior, and the market and the consumers' preferences (Vithayathil et al., 2020). Before the advent of social media, Internet content had a one-way communication with people, but after the advent of social media, communication has become two-way or multi-way (Asma & Misbah, 2018; Ananda et al., 2016). These days, customers tend to share their opinions and experiences through social media after using a particular product (Haddara et al., 2020). Such data made available online can be useful in influencing the opinions of others (Pantano & Charles, 2019).

Therefore, the purpose of understanding consumer buying behavior is to identify the factors influencing buying behavior, understand the decisions related to buying, and also understand the steps involved in such decisions. Consumer behavior is more than the physical purchase of products and covers a wide range of activities from problem awareness to post-purchase behavior, formulating ideas or experiences to satisfy consumer needs and wants. In the marketing field, the decision to buy is influenced by several factors that play an important role in guiding customers toward the final decision. Therefore, understanding the factors affecting the buying process and the buying decision of customers is very important for the marketing team. This study is focused on trying to understand the importance of the factors affecting the buying behavior of consumers in online social media marketing better and also by prioritizing each of them using the importance-performance matrix (IPMA) displaying them in the overall model and two online social media, Telegram and Instagram. It can also be pointed out that the researchers have tried not to limit the research to a specific industry or brand and generally considered the important factors from the consumers' point of view that affected their buying behavior on online social media. In addition, providing a separate structural model for the two social media that are most used by consumers (Telegram and Instagram) has been considered in this research. In addition, researchers are trying to answer this question: What is the importance and performance of each of the factors affecting consumer buying behavior in social media marketing under investigation?

Literature review

-Consumer buying behavior

The way we interact and buy has been modified by the emergence of social media. The impact of social media on consumer buying behavior and priorities has been significant, with marketers now using social media as a critical tool for the target audience. (Dhingra, 2023). Consumer buying behavior is the process through which customers identify their needs, gather information, evaluate alternatives, and finally make a purchase decision. Every company wants success in the marketing process, and achieving it requires managers to understand consumer behavior. Consumer behavior includes the psychological processes that consumers go through in identifying their needs, finding ways to satisfy them, and making buying decisions. The study of consumer behavior is the study

of how people decide to spend available resources (time and money) on consumption-related items (Kumar, 2016).

The behavior of buying products is one of the important things regarding studies related to the consumer or customer field. Consumers are always looking for conditions that provide all the benefits they want. Today, thanks to emerging technologies and various social media, they have gained a lot of knowledge about products and how to obtain them under desired conditions to get the maximum amount of utility.

- Online social media marketing

Online Social media marketing is an integral element of 21st-century business (Felix et al., 2017) and is defined as the dissemination of consumer, business, product, or service-based conversations to promote information and the possibility of using each other's experience with mutual or multiple benefits (Subriadi & Baturohmah, 2021). In other words, online social media marketing refers to the use of an online community, or fan or brand pages on networking sites such as Instagram and business behavior initiated through social media and an attempt to use such media to convince consumers of the value of the company, its products, and services (Goyal, 2018, Liu & Chong, 2023) which allows the companies to achieve their marketing goals with a relatively lower cost (Dwivedi et al., 2021).

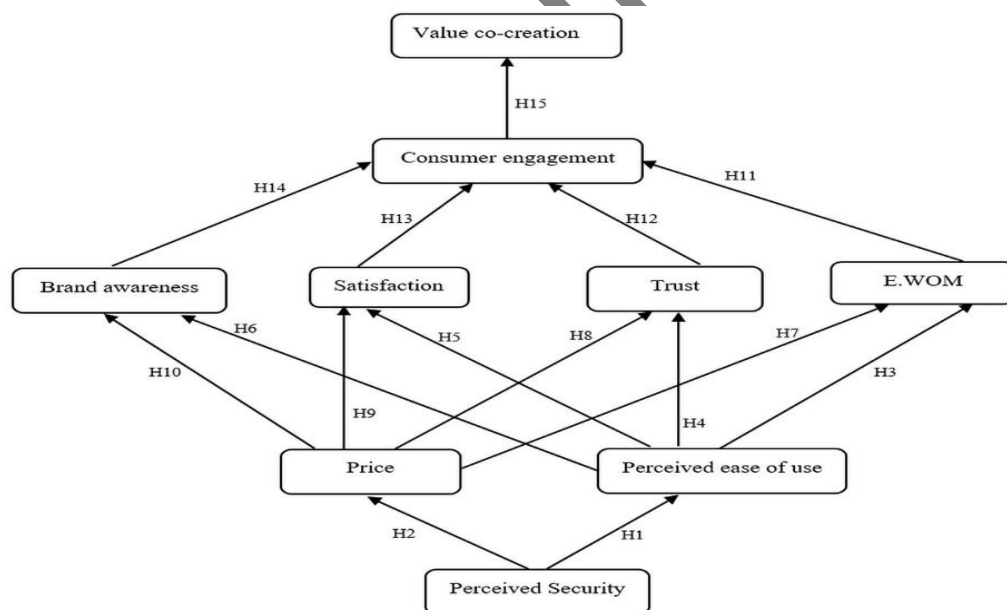


Figure 1. Conceptual model

Explanation of hypotheses and research background

The presented model has examined several online social media marketing activities, which we will describe and present hypotheses upon.

- Perceived security

Perceived security can be defined as the judgment or perception of consumers about whether there is sufficient security for consumers to conduct transactions using the system or services provided by a company (Wilson et al., 2021). Cheng et al., (2006) and Marianus & Ali (2021) confirmed the positive and significant effect of perceived security on ease of use. In terms of the importance of the perceived security factor in online social media, the following hypotheses will be examined:

H1: Perceived security has a significant and positive effect on perceived ease of use.

H2: Perceived security has a significant and positive effect on price.

- Perceived ease of use

Perceived ease of use refers to the degree of usability simplicity in which a person believes that using a particular technology will be effortless (Bailey et al., 2018). In other words, if it is felt that the use of a technology or system is not complicated and can be used easily, then the user will not hesitate to use this technology or system (Chatterjee & Kumar Kar, 2020; Mofokeng, 2023). This factor has been noticed by researchers in the last few years and Quan et al., 2023; Wilson et al., 2021; Eneizan et al., 2020 & Li, 2016 have analyzed and confirmed the effects of perceived ease of use on E-WOM, trust, consumer engagement, and consumer purchase intention. Based on this, the following hypotheses can be made:

H3: Perceived ease of use has a significant and positive effect on E-WOM.

H4: Perceived ease of use has a significant and positive effect on trust.

H5: Perceived ease of use has a significant and positive effect on satisfaction.

H6: Perceived ease of use has a significant and positive effect on brand awareness.

- Price

Price is the key variable in consumer buying decisions. The results of various types of research indicate that the increase in the price of the product can discourage consumers (Medina et al., 2020). Also, a fair price on online social media platforms will gain consumers' trust in online shopping more (Yahia et al., 2018). Isa & Riyadi (2018) have also confirmed the effect of price on brand awareness and satisfaction. In research, Li and Hitt (2010), the effect of price on E-WOM and satisfaction was also investigated, so according to the research literature, the following hypotheses are suggested:

H7: Price has a significant and positive effect on E-WOM.

H8: Price has a significant and positive effect on trust.

H9: Price has a significant and positive effect on satisfaction.

H10: Price has a significant and positive effect on brand awareness.

- Electronic word-of-mouth (E-WOM)

The concept of word-of-mouth, which was introduced in the 1950s, has been revived once again by the Internet under the name of the E – WOM (Voramontri & Klieb, 2019). In fact E-WOM is described as “any positive or negative comment made by potential, actual or former customers about a product or company, which is made available to many individuals and organizations via the Internet” (Feng et al., 2020). The results of research conducted in the field of studying the effect of E-WOM on consumer engagement have proven the existence of a meaningful relationship between them (Bismoaziiz et al., 2021; Bansal & Bansal, 2018; Erkan, 2015). Therefore, the following hypothesis is proposed:

H11: E-WOM has a significant and positive effect on consumer engagement.

- Trust

Trust can be defined as a feeling of expectation regarding a person's trust in the seller, to provide a generous, professional, and ethical product or service (Thanh & Binh, 2020). The effect of trust on consumer participation has been analyzed in studies by researchers such as Agyei et al., (2020); Kosiba et al., (2020) and Thakur, (2018). Accordingly, the following hypothesis is suggested:

H12: Trust has a significant and positive effect on consumer engagement.

- Satisfaction

In recent years, companies have focused on strategies that lead to the most satisfaction levels from consumers (Jindger & Balakrishnan, 2020). Especially in the field of online social media it has proven the significant effect of consumer satisfaction on people's positive attitude towards companies (Thakur, 2018). The results of the studies by Cambra-Fierro et al., 2021; Al-Dmour et al, 2019; Thakur, 2018 have proved the existence of a positive and meaningful relationship between satisfaction and consumer engagement. As a result, the following hypothesis is proposed:

H13: Satisfaction has a significant and positive effect on consumer engagement.

- Brand awareness

Brand awareness shows the consumer's ability to recognize and recall the brand name in different situations (Dabbous & Barakat, 2020). According to many studies that have been conducted in recent years by scholars in the field of social media and consumer behavior, they have proven the existence of a relationship between brand awareness and consumer engagement (Gallart-Camahort et al., 2021; Išoraitė, 2016; Vanitha & Subramanian, 2020), the following hypothesis is proposed:

H14: Brand awareness has a significant and positive effect on consumer engagement.

- Consumer engagement

Consumer engagement in social media refers to the interactions between consumers and the brand (Eslami et al., 2021; Pezzuti et al., 2021). According to Feng et al. (2020), consumer engagement is the exposure, engagement, and interaction of consumers with products or services, and since value co-creation is not possible without consumer engagement (Waśkowski & Jasiulewicz, 2021; Cheung & To., 2021), the following hypothesis is proposed:

H15: Consumer engagement has a significant and positive effect on value co-creation.

- Value co-creation

Value co-creation, which was first proposed by Vargo & Lusch (2014), refers to a process in which different parties create valuable results in cooperation with each other. In social media, value co-creation is reached through the engagement of consumers and companies as buyers and sellers, and the output of the interactions of all parties is an opportunity to create shared value and contribute to the innovation process (Casais et al., 2020; Nadeem et al., 2020).

In this study, we have used the analysis of the importance-performance matrix (IPMA) to prioritize the indicators in the conceptual model of the research. The simplicity of using this tool as a method for further analysis of the results of method SEM- PLS, as well as its application to provide suggestions for management strategies and a clearer insight on how to prioritize resources, makes it an appealing method to be incorporated into management and other sections (Chuang & Chen, 2022). In this regard, according to Table 1, various researchers in various fields have focused on the use of this tool in their research:

Table 1. Importance-Performance Matrix Analysis (IPMA) studies

The author/authors	Title	Principal Findings Related
Sternad Zabukovšek et al (2022)	Enhancing PLS-SEM-Enabled Research with ANN and IPMA: Research Study of Enterprise Resource Planning (ERP) Systems' Acceptance Based on the Technology Acceptance Model (TAM)	The IPMA findings illustrate that the utmost important construction was job compatibility, followed by system and technology features. Meanwhile, the highest performing concept was the individual characteristics with information literacy. Next are attitude, system and technology characteristics, job compatibility, perceived utility, organizational process characteristics, and perceived usability.
Rahmannezhad et al (2021)	Structural Modeling of Organizational Silence Based on Perception of Political Behaviors and Organizational Jealousy with the Mediating Role of Job	The findings of this research show that vocational adjustment is not very important considering its high performance, so to improve organizational silence, more attention should be paid to the categories of organizational behavior and envy.

The author/authors	Title	Principal Findings Related
	Adjustment (Case Study: Employees)	
Janavi et al (2021)	Effect of Social Media Adoption and Media Needs on Online Purchase Behavior: The Moderating Roles of Media Type, Gender, Age	The outcomes of IPMA matrix show that social media adoption was the most important but the lowest performance. In addition, the search for items of primary importance in the evaluation of IPMA shows that mental desires are very important in the perception of the utility of social media.
García-Fernández et al (2020)	Importance-Performance Matrix Analysis (IPMA) to Evaluate Servicescape Fitness Consumer by Gender and Age	The research results confirmed the positive relationship between the service environment and consumer loyalty and their behavioral intentions and after performing IPMA the research results showed that environmental conditions are the most valuable factor for increasing consumer loyalty in fitness centers.
Mollaii & Tahmasebi (2019)	Big Data Platform Model and its role in Data Quality and Business Intelligence	The results showed that big data platform design and data quality challenges have the biggest effect on making businesses intelligent compared to other investigated variables. In addition, according to the performance-importance matrix; big data platform design, big data technologies, and measurement of business acceptance have the highest percentage of importance and performance of the model, respectively.

In some researches such as (Chen & Lin, 2019; Jamil et al., 2022; Liu et al., 2021), the effects of social media marketing activities have been analyzed separately on consumers' purchase or intend to purchase, which we will also follow, and in some other research, these activities have been analyzed generally and under the title of social media marketing (Ismail, 2017; Koay et al., 2021). The mentioned research is mostly focused on platforms like Instagram, Facebook, and Twitter, but due to the filtering issues in Iran, the researchers studied consumers who used platforms that are widely used in the country, such as Telegram, Instagram, WhatsApp, and domestic social media companies like Soroush, iGap, and Eitaa. All domestic online social media platforms, plus WhatsApp were excluded from the analysis related to the importance-performance matrix due to the lack of interest by consumers (less than 5%), and the studies were focused on the two social media, Instagram and Telegram.

Research method and data analysis

The present research is practical in terms of research objectives. Because the validation results of the above model can be used to advance the goals of active businesses in the online social media space. From the point of view of the type and method of data collection, it can be considered descriptive-survey research because it has been done using a questionnaire as a data collection tool. In addition, in terms of research method, it is considered part of quantitative research. In order to collect information, a researcher-made questionnaire containing 9 variables and 31 questions (items) was prepared. The statistical population includes all consumers who shop online through various platforms in the country. The type of sampling method was selected according to the

Figure 2. Outer model of research

Many scholars estimate the acceptable value for the factor loading to be 0.3, some 0.35, and some 0.4 or greater (Plucker, 2003). If the factor loading is less than 0.3, there is a weak relationship and can be ignored. When the value of the factor loading varies between 0.3 and 0.6, it is acceptable. When the value of factor loading is higher than 0.6 it is very desirable (Habibi & Adanvar, 2017). In this study, all factor loadings were above 0.34, which shows that the correlation between the hidden variables (dimensions of each of the main structures) and the observable variables was acceptable.

Table 2. Values of Factor Loading and t-Statistics

Factors	Item	Factor Loading	t-Statistics
E-WOM	VAR00001	0.626	3.388
	VAR00002	0.772	6.568
	VAR00003	0.854	8.270
Brand awareness	VAR00004	0.797	14.955
	VAR00005	0.806	20.926
	VAR00006	0.454	2.825
	VAR00007	0.744	9.368
Price	VAR00008	0.641	6.754
	VAR00009	0.580	3.649
	VAR00010	0.752	11.450
	VAR00011	0.762	11.018
Perceived ease of use	VAR00012	0.739	11.783
	VAR00013	0.630	5.113
	VAR00014	0.721	8.908
Trust	VAR00015	0.729	3.517
	VAR00016	0.809	5.812
	VAR00017	0.753	4.376
Consumer engagement	VAR00018	0.571	2.180
	VAR00019	0.611	3.071
	VAR00020	0.627	2.761
	VAR00021	0.690	3.236
Satisfaction	VAR00022	0.345	6.282
	VAR00023	0.611	4.585
	VAR00024	0.682	4.312
	VAR00025	0.791	8.643
Perceived security	VAR00026	0.836	26.754
	VAR00027	0.857	25.314
	VAR00028	0.805	13.237
Value co- creation	VAR00029	0.860	5.983
	VAR00030	0.758	4.336
	VAR00031	0.544	3.263

After identifying the correlation of the variables, we carried out a significant test. We used t-value statistics to assess the importance of the relationship between the variables. We investigated the significance at an error level of 0.05, so if the t-value test statistic was higher than the critical value of 1.96, the relationship was significant. According to the results, the measurement indicators for each of the scales used at the 5% confidence level, the t-value statistic was greater than 1.96,

which indicates that the relationships observed are significant. Thus, each key variable was measured correctly. Based on the findings of this scale, the we tested the research hypotheses.

1-1-1. Validity and Reliability of the Model

The researchers conducted the following calculations to measure the validity and reliability of the PLS approach and presented the results in Tables 3 and 4:

Table 3. Convergent validity and reliability of research variables

Factors	Cronbach's alpha	AVE	CR	Rho
E.WOM	0.726	0.563	0.816	0.730
Brand awareness	0.722	0.519	0.853	0.761
Price	0.738	0.534	0.740	0.793
Perceived ease of use	0.764	0.538	0.755	0.754
Trust	0.865	0.530	0.801	0.765
Consumer engagement	0.790	0.566	0.852	0.814
Satisfaction	0.737	0.601	0.782	0.785
Perceived security	0.844	0.627	0.764	0.751
Value co- creation	0.825	0.633	0.758	0.769

Table 4. Divergent Validity Values by Fornell-Larker method

	E.WOM	B A	Price	P. EOU	Trust	C E	Satisfaction	P. Sec	V. Co-C
E.WOM	0.853								
Brand awareness	0.834	0.895							
Price	0.825	0.860	0.872						
Perceived ease of use	0.792	0.845	0.867	0.889					
Trust	0.753	0.846	0.865	0.870	0.891				
Consumer engagement	0.736	0.793	0.804	0.860	0.853	0.890			
Satisfaction	0.703	0.774	0.810	0.817	0.825	0.883	0.894		
Perceived security	0.692	0.757	0.761	0.775	0.792	0.800	0.816	0.886	
Value co- creation	0.683	0.719	0.733	0.765	0.781	0.794	0.809	0.822	0.898

As shown in Table 4, the values on the main diameter of the matrix were greater than all the values in the corresponding column, which indicates that our model had good divergent validity. According to the recent research by (Henseler et al., 2015) the Fornell-Larker criterion did not work well when the factor loadings of the structures were slightly different. Therefore, they proposed the HTMT standard as an alternative. If the values of all the numbers in the columns, in this method, were less than 0.9, the model had the good divergence validity.

Table 5. Results of HTMT method to evaluate divergent validity

	E.WOM	B. A	P	P.EOU	T	C. A	S	P.S	V. CO-C
E.WOM									
B. A	0.820								
P	0.729	0.733							
P. EOU	0.738	0.649	0.645						
T	0.719	0.745	0.730	0.805					
C. A	0.845	0.487	0.591	0.630	0.817				
S	0.777	0.830	0.369	0.745	0.499	0.803			

P. S	0.795	0.732	0.625	0.549	0.537	0.589	0.627		
V. CO-C	0.839	0.640	0.439	0.521	0.735	0.719	0.621	0.833	

According to Table 5, the values obtained from the calculations are less than 0.9 and therefore the divergent HTMT validity was acceptable.

2-1: Inner Model (Model Fitting)

After ensuring the validity of the measurement models through reliability, convergent and divergent validity tests, the research team presented the results of the structural model. We used indices structural model fit indices, including criterion R^2 , effect size criterion F^2 and criterion Q^2 to evaluate the model fitting.

Table 6. Indices of Structural Model Fitting

	Q^2	R^2	F^2								
			E-WOM	C E	Trust	Satisfaction	B A	V. Co c	P. EOU	P S	Price
E-WOM	0.628	0.659		0.426							
C E	0.728	0.455						0.637			
Trust	0.652	0.450		0.740							
Satisfaction	0.504	0.304		0.381							
B A	0.836	0.477		0.386							
Value Co-c	0.629	0.700									
P. EOU	0.700	0.349	0.544		0.513	0.493	0.380				
P. S	0.773	-							0.502		0.458
Price	0.825	0.480	0.609		0.497	0.510	0.537				

We calculated the value of the coefficient of determination, R^2 only for endogenous (dependent) structures of the model. In the case of exogenous structures, the value of this criterion was 0. The greater the value of R^2 of the endogenous structures of a model, the better the fit of the model. Chin identified three values of 0.19, 0.33, and 0.67 as substantial, moderate, and weak values of the model (Chin W, 1998). The effect size F^2 , applicable to exogenous independent variables, was another indicator of the fit of the structural model. Jacob Cohen introduced this index in 1988 to show the amount of change in the estimation of the dependent variable for an independent variable, when the effect of that variable is removed. Cohen defined by the values of this index as 0.02 (small), 0.15 (medium) and 0.35 (large), respectively (Cohen, 1988).

The predictive relevance Q^2 of model or redundancy sharing is another criterion for examining the structural model (Hair et al., 2019). Stated different values for the intensity of the model's predictive relevance for endogenous structures and identified the three values of 0, 0.25 and 0.50 as weak, moderate and strong predictive relevance, respectively. We applied blindfolding technique to calculate Q^2 value in PLS software. The calculated values, Table 6, revealed that the model fitting and its predictive relevance are strongly confirmed.

1-2-1: General Fitting of the Developed Model

(Tenenhaus et al., 2005) proposed the Goodness of Fit (GoF) criterion. The (GoF) indicator is explained as the geometric mean of the shared mean and the mean R² for all endogenous concept (Akter et al., 2011). Also, (GOF) is used as an index for the complete model fit to ensure that the model adequately explicates the empirical evidence (Hussain et al., 2018) and this index is limited from 0 to 1. It is calculated according to the following formula:

$$GoF = \sqrt{Avg(Communalities) \times R^2}$$

The commonality term represents the average common values in a particular construct and R² is the average explained variance of the endogenous constructs of the model. (Wetzels et al., 2009) suggested that three values, 0.01, 0.025, and 0.36, were low, moderate, and high for GoF. Calculating GoF index:

$$Avg(R^2) = 0.484$$

$$GoF = \sqrt{0.712 \times 0.484} = 0.587$$

According to the value obtained from the calculation of the GoF index, the overall fit of the presented model is confirmed

Testing Hypotheses

In this study, we used the PLS technique and Smart PLS 3 software to test the hypotheses, and presented the results in Table 7.

Table 7. The Results of Hypothesis Testing

N	Hypothesis	Path coefficient	T-statistic	sig level	result
1	Perceived security has a significant and positive effect on perceived ease of use	0.591	7.027	0.000	Supported
2	Perceived security has a significant and positive effect on price.	0.230	1.269	0.087	Not Supported
3	Perceived ease of use has a significant and positive effect on E-WOM.	0.596	4.517	0.000	Supported
4	Perceived ease of use has a significant and positive effect on trust.	0.463	3.365	0.000	Supported
5	Perceived ease of use has a significant and positive effect on satisfaction.	0.546	6.249	0.000	Supported
6	Perceived ease of use has a significant and positive effect on brand awareness.	0.511	2.198	0.000	Supported
7	Price has a significant and positive effect on E-WOM.	0.433	3.611	0.000	Supported
8	Price has a significant and positive effect on trust.	0.628	4.825	0.000	Supported
9	Price has a significant and positive effect on satisfaction.	0.484	4.913	0.000	Supported
10	Price has a significant and positive effect on brand awareness.	0.507	4.805	0.000	Supported
11	E-WOM has a significant and positive effect on consumer engagement.	0.529	3.452	0.000	Supported
12	Trust has a significant and positive effect on consumer engagement.	0.419	5.928	0.000	Supported
13	Satisfaction has a significant and positive effect on consumer engagement.	0.546	4.517	0.000	Supported
14	Brand awareness has a significant and positive effect on consumer engagement.	0.604	5.722	0.000	Supported
15	Consumer engagement has a significant and positive effect on value co-creation.	0.428	4.911	0.000	Supported

The results indicated that the path coefficient in all but the second hypothesis was greater than 0.3. In the second hypothesis, which examined the impact of perceived security on price, the path coefficient was 0.230. Under all but the second hypothesis, the significance level was below

0.05. (0.000). the confidence factor of 0.95, therefore, indicates that all but the second hypothesis has been confirmed.

2. Importance-Performance Matrix Analysis (IPMA)

Importance-Performance Matrix Analysis (IPMA) is a useful analytical approach in Smart PLS3 software. It is known as IPMA and adds a new dimension to the analysis (Mohamed & Yusoff, 2021). IPMA graphical tool is a useful technique for determining the characteristics of a product or service that is in need of management decisions and quick response to develop effective and innovative marketing programs to achieve superiority over competitors and provide profitable customer service (García-Fernández et al., 2020). In this study, we designed Importance-Performance Matrix to determine the importance and performance of each indicator for the main model in general and users of Instagram and Telegram, which were the most-used platforms among respondents.

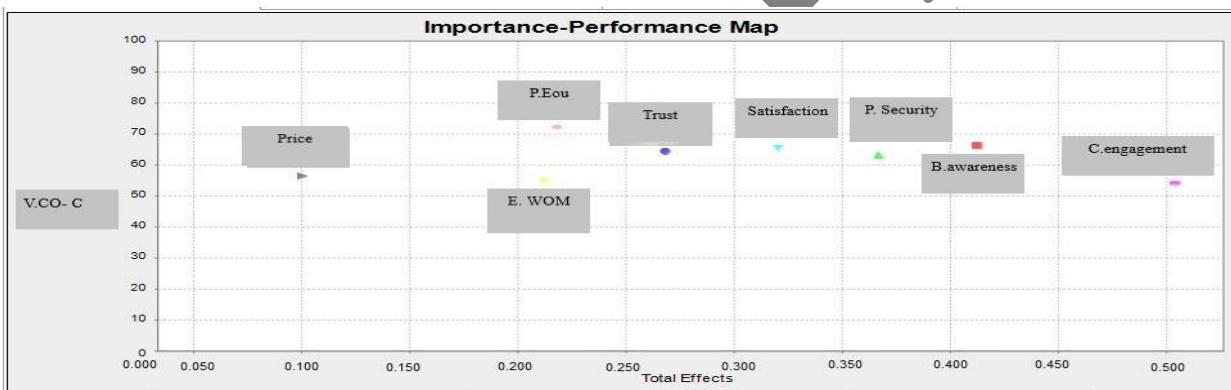


Figure 3. IPMA results of general model

According to the results, consumer engagement had the highest degree of importance (0.508) and the perceived ease of use variable had the highest performance (72.212).

Table. 8. Ranking the Importance and Performance of each Indicator in general model.

	Importance	Rank	Performance	Rank
E-WOM	0.220	7	56.537	6
Brand awareness	0.410	2	66.249	2
Price	0.110	8	56.432	7
Perceived ease of use	0.226	6	72.212	1
Trust	0.264	5	64.421	4
Consumer engagement	0.508	1	54.163	8
Satisfaction	0.322	4	65.365	3
Perceived security	0.373	3	63.469	5

1-2. Importance and Performance Indicators in Instagram

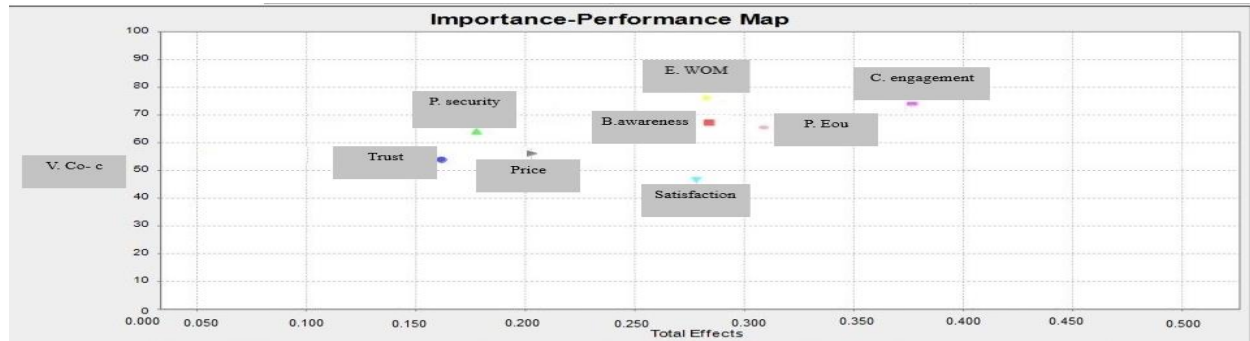


Figure 9. IPMA results of Instagram

According to the results, consumer engagement had the highest degree of importance (0.365) and E-WOM had the highest performance (78.088).

Table. 9. Ranking the Importance and Performance of each Indicator in Instagram

	Importance	Rank	Performance	Rank
E-WOM	0.278	4	78.088	1
Brand awareness	0.280	3	67.860	3
Price	0.203	6	59.725	6
Perceived ease of use	0.308	2	65.124	4
Trust	0.156	8	50.854	7
Consumer engagement	0.365	1	74.662	2
Satisfaction	0.274	5	49.729	8
Perceived security	0.165	7	63.469	5

2-2. Importance and Performance Indicators in Telegram

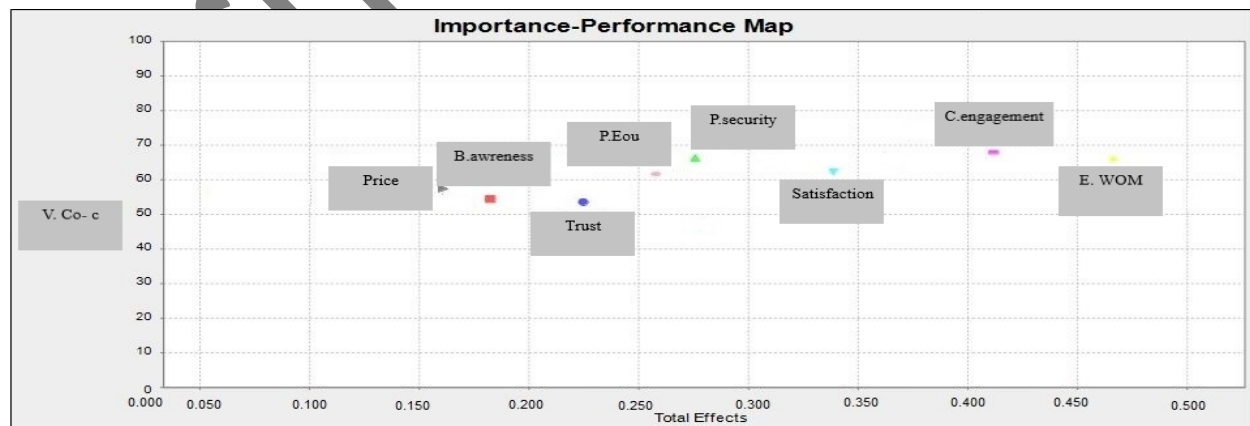


Figure 10. IPMA results of telegram

According to the results, E-WOM had the highest degree of importance (0.464) and consumer engagement had the highest performance (69.506).

Table. 10. Ranking the Importance and Performance of each Indicator in Telegram

	Importance	Rank	Performance	Rank
E-WOM	0.464	1	67.339	2
Brand awareness	0.183	7	54.702	7
Price	0.156	8	58.995	6
Perceived ease of use	0.254	5	61.230	5
Trust	0.234	6	53.823	8
Consumer engagement	0.410	2	69.506	1
Satisfaction	0.342	3	62.966	4
Perceived security	0.272	4	65.830	3

Discussion, Conclusions, and Suggestions

In the present study, the effect of perceived security on the two factors of ease of use and price was directly investigated (hypotheses 1 and 2) and the effect of perceived security on ease of use was confirmed, which was confirmed with the results of the research of Marianus and Ali, 2021, as well as Cheng et al, 2006 is consistent. However, according to the values of the path coefficient, t-statistic, and significance level, the effect of perceived security on the price factor cannot be confirmed. As a result, the researcher rejected this relationship (hypothesis 2). Also, In this research, the effect of ease of use on electronic word-of-mouth, trust, satisfaction, and brand awareness was analyzed (hypotheses 3, 4, 5, & 6) and confirmed. The findings are consistent with the research results (Wilson et al., 2021; Eneizan et al., 2020; Lee, 2016). Of course, it should be acknowledged that the results of the research conducted by Lee in 2016 measuring the effects of ease of use on satisfaction are not consistent with the findings of the current research, and Lee did not confirm this relationship. In addition the findings of this research are consistent with the results of Isa and Riyadi, 2018 and Lee & Hitt, 2010 regarding the positive and significant effect of price on EWOM, trust, satisfaction, and brand awareness (hypotheses 7, 8, 9 & 10). The analysis of the effect of EWOM on consumer engagement, which was examined in (hypothesis 11), reported a positive and significant effect, which is the same as the findings of Bismoaziiz et al., 2021; Bansal & Bansal, 2018; Erkan, 2015 research. Also research on the effect of trust on consumer engagement (hypothesis 12) has been confirmed in the studies of researchers such as (Agyei et al., 2020; Kosiba et al., 2020; Thakur, 2018), which is consistent with the results of this research. As well as the results of the current research have confirmed the relationship between the satisfaction factor and consumer participation (hypothesis 13), which is consistent with the findings of the research (Cambra Fiyero et al., 2021; Al Dmoure et al., 2019, Thakur, 2018). According to the path coefficient and t-statistics, the effect of the brand awareness variable on consumer engagement (hypothesis 14) is confirmed. Our findings are in line with the research results of Gallart Kamahort et al., 2021 and Vanitha and Subramanian, 2020 & Isoraite, 2016 are consistent. In addition, the

results of our findings regarding the positive and significant impact of consumer participation on value are consistent with the findings of Cheung & To, 2021 and Waśkowski & Jasiulewicz, 2021.

The results of the Importance-Performance Matrix Analysis were also very important in the three models of online social media presented in the final part of the research. In the general model of online social media, consumer engagement was the most important and ease of use had the highest performance. In Instagram, which was categorized as the most widely used online social platform by consumers, consumer engagement was the most important and E-WOM had the highest performance. Furthermore, studying the Importance-Performance Matrix of Telegram showed that E-WOM was of the highest importance and consumer engagement in terms of performance had the highest position among other factors. The analysis of the IPMA matrix indicated that consumer engagement was the most important factor in both the general model and Instagram. This factor ranked eighth in terms of performance in the general model and second in Instagram. Companies that use online social media platforms are expected to strengthen consumer engagement and improve performance by adopting short-term techniques and effective strategies such as the possibility of online chat in the user environment.

However, Instagram is the most widely used social media and a consumer online shopping portal. On Instagram, consumer engagement had acceptable performance. So, it requires companies to take some steps to increase the expected performance and equal to its importance. In the telegram, the E-WOM was the most important factor among other factors that its performance rating was very good. Companies can strengthen their CRM units and increase WOM as much as possible.

The findings of the research were obtained from real research and real data collected from online consumers. Iranian scholars neglected the application of Importance-Performance Matrix Analysis (IPMA), so it is the strength of the present study. The researchers prioritized various factors in terms of importance and type of performance based on the opinions of the consumers who used the online social media platforms.

To carry out this research, we have faced some limitations, of course, which will be addressed as follows. In addition, some suggestions will be provided to the scholars who are interested in subjects related to the topic of the article:

1. The research whose results are now published in this article is related to a specific period (cross-sectional study). Respected scholars can use longitudinal designs in the future and record the changes in the opinions and attitudes of consumers during the period.
2. Because the current study is not limited to a specific industry or brand, the quantitative model used is almost limited and indicators related to the field of advertising and branding are not included in it. The structural model can be developed by adding such variables in the future.

3. In the existing structural model, the recurrence relations of the variables (the mutual effect of two variables on each other) have not been analyzed. Such relations, which require longitudinal studies, can be considered in the model that will be under study in the future.

Conflict of interest

The authors do not state any potential conflicts of interest concerning the publication of this work.

References

- Agyei, J., Sun, S., Abrokwhah, E., Penney, E. K., & Ofori-Boafo, R. (2020). Influence of Trust on Customer Engagement: Empirical Evidence from the Insurance Industry in Ghana. *SAGE Open*, 10(1). <https://doi.org/10.1177/2158244019899104>
- Akter, S., D'Ambra, J., & Ray, P. (2011). An evaluation of PLS based complex models: The roles of power analysis, predictive relevance and GoF index. 17th Americas Conference on Information Systems 2011, AMCIS 2011, 2, 1313–1319.
- Al-Dmour, H. H., Ali, W. K., & Al-Dmour, R. H. (2019). The relationship between customer engagement, satisfaction, and loyalty. *International Journal of Customer Relationship Marketing and Management*, 10(2), 35–60. <https://doi.org/10.4018/IJCRMM.2019040103>
- Ananda, A. S., Hernández-García, Á., & Lamberti, L. (2016). N-REL: A comprehensive framework of social media marketing strategic actions for marketing organizations. *Journal of Innovation and Knowledge*, 1(3), 170–180. <https://doi.org/10.1016/j.jik.2016.01.003>
- Asma, G., Misbah, M. (2018). Impact of Social Media Marketing on Consumer Buying Behaviour - A study. *Research review International Journal of Multidisciplinary*, 3(6), 219–222. www.rrjournals.com.
- Auf, M. A. A., Meddour, H., Saoula, O., & Majid, A. H. A. (2018). Consumer buying behaviour: The roles of price, motivation, perceived culture importance, and religious orientation. *Journal of Business and Retail Management Research*, 12(4), 177–186. <https://doi.org/10.24052/jbrmr/v12is04/art-18>
- Aw, E. C. X., Kamal Basha, N., Ng, S. I., & Ho, J. A. (2021). Searching online and buying offline: Understanding the role of channel-, consumer-, and product-related factors in determining webrooming intention. *Journal of Retailing and Consumer Services*, 58(May 2020). <https://doi.org/10.1016/j.jretconser.2020.102328>
- Bailey, A. A., Bonifield, C. M., & Arias, A. (2018). Social media use by young Latin American consumers: An exploration. *Journal of Retailing and Consumer Services*, 43(February), 10–19. <https://doi.org/10.1016/j.jretconser.2018.02.003>
- Bansal, S., & Bansal, I. (2018). Consumer engagement in electronic word-of-mouth on social networking sites. *Elk asia pacific journal of marketing and retail management*. 9(1). <https://doi.org/10.16962/EAPJMRM>
- Bismoaziiz, B., Suhud, U., & Saparuddin, S. (2021). Influence of Social Media Marketing, Electronic Word of Mouth and Consumer Engagement To Brand Loyalty in Indonesia Grab Company. *International Journal of Business and Social Science Research*, January 2020, 16–26. <https://doi.org/10.47742/ijbssr.v2n2p3>
- Cambra-Fierro, J. J., Fuentes-Blasco, M., Huerta-Álvarez, R., & Olavarría, A. (2021). Customer-based brand equity and customer engagement in experiential services: insights from an

- emerging economy. *Service Business*, 15(3), 467–491. <https://doi.org/10.1007/s11628-021-00448-7>
- Canio, F. De, & Fuentes-blasco, M. (2021). Journal of Retailing and Consumer Services I need to touch it to buy it ! How haptic information influences consumer shopping behavior across channels ☆. *Journal of Retailing and Consumer Services*, 61(October 2020), 102569. <https://doi.org/10.1016/j.jretconser.2021.102569>
- Casais, B., Fernandes, J., & Sarmento, M. (2020). Tourism innovation through relationship marketing and value co-creation: A study on peer-to-peer online platforms for sharing accommodation. *Journal of Hospitality and Tourism Management*, 42(November 2019), 51–57. <https://doi.org/10.1016/j.jhtm.2019.11.010>
- Chatterjee, S., & Kumar Kar, A. (2020). Why do small and medium enterprises use social media marketing and what is the impact: Empirical insights from India. *International Journal of Information Management*, 53, 102103. <https://doi.org/10.1016/J.IJINFOMGT.2020.102103>
- Chen, S. C., & Lin, C. P. (2019). Understanding the effect of social media marketing activities: The mediation of social identification, perceived value, and satisfaction. *Technological Forecasting and Social Change*, 140(November 2018), 22–32. <https://doi.org/10.1016/j.techfore.2018.11.025>
- Cheng, T. C. E., Lam, D. Y. C., & Yeung, A. C. L. (2006). Adoption of internet banking: An empirical study in Hong Kong. *Decision Support Systems*, 42(3), 1558–1572. <https://doi.org/10.1016/j.dss.2006.01.002>
- Cheung, M. F. Y., & To, W. M. (2021). Effect of customer involvement on co-creation of services: A moderated mediation model. *Journal of Retailing and Consumer Services*, 63(June). <https://doi.org/10.1016/j.jretconser.2021.102660>
- Chin W, M. G. (1998). The Partial Least Squares Approach to Structural Formula Modeling. *Advances in Hospitality and Leisure*, 8 (2) (January 1998), 5.
- Chuang, H. M., & Chen, C. I. (2022). Sustaining the Well-Being of Wearable Technology Users: Leveraging SEM-Based IPMA and VIKOR Analyses to Gain Deeper Insights. *Sustainability (Switzerland)*, 14(13). <https://doi.org/10.3390/su14137799>
- Cohen, J. E. (1988). Statistical Power Analysis for the Behavioral Sciences. *Hillsdale, NJ: Lawrence Erlbaum Associates, Inc*
- Dabbous, A., & Barakat, K. A. (2020). Bridging the online offline gap: Assessing the impact of brands' social network content quality on brand awareness and purchase intention. *Journal of Retailing and Consumer Services*, 53(November 2018), 101966. <https://doi.org/10.1016/j.jretconser.2019.101966>
- Dhingra, A. (2023). *Impact Of social media On Consumer Behaviour and Preference*. 5(2), 1–8.
- Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., Jain, V., Karjaluoto, H., Kefi, H., Krishen, A. S., Kumar, V., Rahman, M. M., Raman, R., Rauschnabel, P. A., Rowley, J., Salo, J., Tran, G. A., & Wang, Y. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management*, 59(June). <https://doi.org/10.1016/j.ijinfomgt.2020.102168>
- Eger, L., Komárková, L., Egerová, D., & Mičík, M. (2021). The effect of COVID-19 on consumer shopping behaviour: Generational cohort perspective. *Journal of Retailing and Consumer Services*, 61(December 2020). <https://doi.org/10.1016/j.jretconser.2021.102542>
- Eneizan, B., Alsaad, A., Alkhawaldeh, A., Rawash, H. N., & Enaizan, O. (2020). E-WOM, trust, usefulness, ease of use, and online shopping via websites: The moderating role of online

- shopping experience. *Journal of Theoretical and Applied Information Technology*, 98(13), 2554–2565
- Erkan, I. (2015). Electronic Word of Mouth on Instagram: Customers' Engagements with Brands in Different Sectors. *International Journal of Management, Accounting and Economics*, 2(12), 1435–1444.
- Eslami, S. P., Ghasemaghaei, M., & Hassanein, K. (2021). Understanding consumer engagement in social media: The role of product lifecycle. *Decision Support Systems*, xxxx, 113707. <https://doi.org/10.1016/j.dss.2021.113707>
- Fakfare, P. (2021). Influence of service attributes of food delivery application on customers' satisfaction and their behavioural responses: The IPMA approach. *International Journal of Gastronomy and Food Science*, 25(June), 100392. <https://doi.org/10.1016/j.ijgfs.2021.100392>
- Felix, R., Rauschnabel, P. A., & Hinsch, C. (2017). Elements of strategic social media marketing: A holistic framework. *Journal of Business Research*, 70, 118–126. <https://doi.org/10.1016/j.jbusres.2016.05.001>
- Feng, N., Feng, H., Li, D., & Li, M. (2020). Online media coverage, consumer engagement and movie sales: A PVAR approach. *Decision Support Systems*, 131(February), 113267. <https://doi.org/10.1016/j.dss.2020.113267>
- Gallart-Camahort, V., De la Oliva-Ramos, E., & Fernández-Durán, L. (2021). Luxury Brands: awareness and image and its influence on loyalty and engagement. *Contextus – Revista Contemporânea de Economia e Gestão*, 19, 305–315. <https://doi.org/10.19094/contextus.2021.71415>
- García-Fernández, J., Fernández-Gavira, J., Sánchez-Oliver, A. J., Gálvez-Ruíz, P., Grimaldi-Puyana, M., & Cepeda-Carrión, G. (2020). Importance-performance matrix analysis (Ipma) to evaluate servicescape fitness consumer by gender and age. *International Journal of Environmental Research and Public Health*, 17(18), 1–19. <https://doi.org/10.3390/ijerph17186562>
- Goyal, M. (2018). A review of literature on social media marketing strategies. *Journal of Emerging Technologies and Innovative Research (JETIR)*, 5(4). 35-39
- Grimmer, L. (2022). Lessons from the COVID19 pandemic: The case of retail and consumer service firms. *Journal of Retailing and Consumer Services*, 68(April), 103012. <https://doi.org/10.1016/j.jreteconser.2022.103012>
- Habibi, A., & Adanvar, M. (2017). Structural equation modeling and Factor Analysis, LISREL software application training. (6th ed). Tehran. Academic center for education, culture and research.
- Haddara, M., Hsieh, J., Fagerstrøm, A., Eriksson, N., & Sigurðsson, V. (2020). Exploring customer online reviews for new product development: The case of identifying reinforcers in the cosmetic industry. *Managerial and Decision Economics*, 41(2), 250–273. <https://doi.org/10.1002/mde.3078>
- Hair, J. F., Sarstedt, M., & Ringle, C. M. (2019). Rethinking some of the rethinking of partial least squares. *European Journal of Marketing*, 53(4), 566–584. <https://doi.org/10.1108/EJM-10-2018-0665>
- Hassan, H., Hsbollah, H. M., & Mohamad, R. (2021). Examining the interlink of social media use, purchase behavior, and mental health. *Procedia Computer Science*, 196(2021), 85–92. <https://doi.org/10.1016/j.procs.2021.11.076>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of*

- Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hussain, S., Fangwei, Z., Siddiqi, A. F., Ali, Z., & Shabbir, M. S. (2018). Structural Equation Model for evaluating factors affecting quality of social infrastructure projects. *Sustainability (Switzerland)*, 10(5), 1–25. <https://doi.org/10.3390/su10051415>
- Isa, J., & Riyadi, S. (2018). *E-Wom And Price Perception On Image , Satisfaction , And Loyalty For Consumers Of Toyota Family Cars*. 7(3), 29–37.
- Ismail, A. R. (2017). The influence of perceived social media marketing activities on brand loyalty. *Asia Pacific Journal of Marketing and Logistics*, 29(1), 129–144. <https://doi.org/10.1108/apjml-10-2015-0154>
- Işoraité, M. (2016). Raising Brand Awareness Through Internet Marketing Tools. *Independent Journal of Management & Production*, 7(2), 320–339. <https://doi.org/10.14807/ijmp.v7i2.391>
- Jamil, K., Dunnann, L., Gul, R. F., Shehzad, M. U., Gillani, S. H. M., & Awan, F. H. (2022). Role of Social Media Marketing Activities in Influencing Customer Intentions: A Perspective of a New Emerging Era. *Frontiers in Psychology*, 12(January), 1–12. <https://doi.org/10.3389/fpsyg.2021.808525>
- Janavi, E., Soleimani, M., Gholampour, A., Friedrichsen, M., & Ebrahimi, P. (2021). Effect of Social Media Adoption and Media Needs on Online Purchase Behavior: The Moderator Roles of Media Type, Gender, Age. *Journal of Information Technology Management*. 13(2). 1-24. <https://doi.org/10.22059/jitm2020.300799.2501>
- Jindger, G. S. (2020). Impact of customer engagement practices on consumer satisfaction and loyalty : a study with special reference to. *Journal of Interdisciplinary Cycle Research* XII(38), 38–53.
- Koay, K. Y., Ong, D. L. T., Khoo, K. L., & Yeoh, H. J. (2021). Perceived social media marketing activities and consumer-based brand equity : Testing a moderated mediation model. *Asia Pacific Journal of Marketing and Logistics*, 33(1), 53–72. <https://doi.org/10.1108/APJML-07-2019-0453>
- Kosiba, J. P., Boateng, H., Okoe, A. F., & Hinson, R. (2020). Trust and customer engagement in the banking sector in Ghana. *Service Industries Journal*, 40(13–14), 960–973. <https://doi.org/10.1080/02642069.2018.1520219>
- Kumar, A. A. (2016). Factors Influencing Customers Buying Behavior. *Global Journal of Management and Business Reserach : E Marketing*, 16(3), 30–35. <https://iiste.org/Journals/index.php/JMCR/article/view/33116>
- Kumar Sharma, M. (2014). The Impact on Consumer Buying Behaviour: Cognitive Dissonance. *Global Journal of Finance and Management*, 6(9), 975–6477. <http://www.ripublication.com>
- Li, Y. (2016). Empirical Study of Influential Factors of Online Customers' Repurchase Intention. *IBusiness*, 08(03), 48–60. <https://doi.org/10.4236/ib.2016.83006>
- Liu, C., & Chong, H. T. (2023). Social media engagement and impacts on post-COVID-19 travel intention for adventure tourism in New Zealand. *Journal of Outdoor Recreation and Tourism*, 100612. <https://doi.org/10.1016/J.JORT.2023.100612>
- Liu, X., Shin, H., & Burns, A. C. (2021). Examining the impact of luxury brand's social media marketing on customer engagement: Using big data analytics and natural language processing. *Journal of Business Research*, 125(January 2018), 815–826. <https://doi.org/10.1016/j.jbusres.2019.04.042>
- Marianus, S., & Ali, S. (2021). Factors Determining the Perceived Security Dimensions in B2C Electronic Commerce Website Usage: An Indonesian Study. *Journal of Accounting and Investment*, 22(1), 104–132. <https://doi.org/10.18196/jai.v22i1.8171>

- Medina, C. A. G., Martinez-Fiestas, M., Viedma-del-Jesús, M. I., & Casado Aranda, L. A. (2020). The processing of price during purchase decision making: Are there neural differences among prosocial and non-prosocial consumers? *Journal of Cleaner Production*, 271, 122648. <https://doi.org/10.1016/j.jclepro.2020.122648>
- Mofokeng, T. E. (2023). Antecedents of trust and customer loyalty in online shopping: The moderating effects of online shopping experience and e-shopping spending. *Heliyon*, 9(5), e16182. <https://doi.org/10.1016/J.HELIYON.2023.E16182>
- Mohamed, Z., & Yusoff, M. S. A. (2021). Malcolm Baldrige Approach in University Management: An Importance – Performance Matrix Analysis (IPMA). *Asian Journal of University Education*, 17(2), 273–282. <https://doi.org/10.24191/AJUE.V17I2.13408>
- Mollaii, N., & Tahmasebi. A. (2019). Big Data Platform Model and its role in Data Quality and Business Intelligence. *Emergancy Management*. 8(17). 61-72. http://www.joem.ir/article_36657.html?lang=fa
- Murtaza, R. (2021). Impact of social media on consumer buying behavior. *International Journal of Creative Research Thoughts (IJCRT)*, 9(5). 476-487. www.ijcrt.org
- Nadeem, W., Juntunen, M., Shirazi, F., & Hajli, N. (2020). Consumers' value co-creation in sharing economy: The role of social support, consumers' ethical perceptions and relationship quality. *Technological Forecasting and Social Change*, 151, 119786. <https://doi.org/10.1016/J.TECHFORE.2019.119786>
- Pantano, E. G. S & Dennis, Charles. (2019). Making sense of consumers' tweets: sentiment outcomes for fast fashion retailers through big data analytics. *International Journal of Retail & Distribution Management*, 47 (9). pp. 915-927. <https://doi.org/10.1108/IJRDM-07-2018-0127>
- Pezzuti, T., Leonhardt, J. M., & Warren, C. (2021). Certainty in Language Increases Consumer Engagement on Social Media. *Journal of Interactive Marketing*, 53, 32–46. <https://doi.org/10.1016/j.intmar.2020.06.005>
- Plucker, J. A. (2003). Exploratory and Confirmatory Factor Analysis in Gifted Education: Examples with Self-Concept Data. *Journal for the Education of the Gifted*, 27(1), 20–35. <https://doi.org/10.1177/016235320302700103>
- Quan, W., Moon, H., Kim, S. (Sam), & Han, H. (2023). Mobile, traditional, and cryptocurrency payments influence consumer trust, attitude, and destination choice: Chinese versus Koreans. *International Journal of Hospitality Management*, 108, 103363. <https://doi.org/10.1016/J.IJHM.2022.103363>
- Rahmannezhad, A., Yarihajatalo, J., Maleki, A.S., & Hasani, R. (2021). Structural Modeling of Organizational Silence Based on Perception of Political Behaviors and Organizational Jealousy with the Mediating Role of Job Adjustment (Case Study: Employees). *Journal of Research in Teaching*, 9(1).1-21. https://trj.uok.ac.ir/article_61834.html
- Rajabi, S., Lashgarara, F., Omid, M., & Farajallah Hosseini, S. J. (2020). Application of structural equation modeling to scrutinize the causes of grape losses in production chain. *Journal of Agricultural Science and Technology*, 22(3), 625–638.
- Sternad Zabukovšek, S., Bobek, S., Zabukovšek, U., Kalinić, Z., & Tominc, P. (2022). Enhancing PLS-SEM-Enabled Research with ANN and IPMA: Research Study of Enterprise Resource Planning (ERP) Systems' Acceptance Based on the Technology Acceptance Model (TAM). *Mathematics*, 10(9). <https://doi.org/10.3390/math10091379>
- Subriadi, A. P., & Baturmah, H. (2021). Social media in marketing of ride-hailing: A systematic literature review. *Procedia Computer Science*, 197(2021), 102–109. <https://doi.org/10.1016/j.procs.2021.12.123>

- Tenenhaus, M., Vinzi, V. E., Chatelin, Y. M., & Lauro, C. (2005). PLS path modeling. *Computational Statistics and Data Analysis*, 48(1), 159–205.
<https://doi.org/10.1016/j.csda.2004.03.005>
- Thakur, R. (2018). Customer engagement and online reviews. *Journal of Retailing and Consumer Services*, 41(February 2017), 48–59. <https://doi.org/10.1016/j.jretconser.2017.11.002>
- Thanh, N. N. D., & Binh, N. T. (2020). The relationship between online trust, customer engagement and EWOM. *Hcmcoujs - Economics and Business Administration*, 9(1), 128–149. <https://doi.org/10.46223/hcmcoujs.econ.en.9.1.180.2019>
- Vanitha, P., & Subramanian, S. (2020). A Study on Brand Awareness and Customer Engagement. *Indian Journal of Public Health Research & Development*, 11(03), 258–262. <https://doi.org/10.37506/ijphrd.v11i3.828>
- Vithayathil, J., Dadgar, M., & Osiri, J. K. (2020). Social media use and consumer shopping preferences. *International Journal of Information Management*, 54(March). <https://doi.org/10.1016/j.ijinfomgt.2020.102117>
- Voramontri, D., & Klieb, L. (2019). Impact of social media on consumer behaviour. *International Journal of Information and Decision Sciences*, 11(3), 209–233. <https://doi.org/10.1504/IJIDS.2019.101994>
- Waśkowski, Z., & Jasiulewicz, A. (2021). Consumer engagement using digital technologies in the process of co-creating consumer value in the sports market. *Journal of Physical Education and Sport*, 21(2), 1131–1141. <https://doi.org/10.7752/jpes.2021.s2143>
- Wetzels, M., Odekerken-Schröder, G., & Van Oppen, C. (2009). Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. *MIS Quarterly: Management Information Systems*, 33(1), 177–196. <https://doi.org/10.2307/20650284>
- Wilson, N., Alvita, M., & Wibisono, J. (2021). the Effect of Perceived Ease of Use and Perceived Security Toward Satisfaction and Repurchase Intention. *Jurnal Muara Ilmu Ekonomi Dan Bisnis*, 5(1), 145. <https://doi.org/10.24912/jmiebv5i1.10489>
- Yahia, I. Ben, Al-Neama, N., & Kerbache, L. (2018). Investigating the drivers for social commerce in social media platforms: Importance of trust, social support and the platform perceived usage. *Journal of Retailing and Consumer Services*, 41(October 2017), 11–19. <https://doi.org/10.1016/j.jretconser.2017.10.021>